

NO. 132

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliot
Joint Welding Procedure tig
Part number and Job number B35501 / B35501

TEST WELDS REQUIRED

BASE METAL Aluminum WELDING PROCESS tig
Penetration Complete ☒ Partial ☐ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input checked="" type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input checked="" type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07-11-08 Qualifier Peter D.

INSTALL ALS4-1032-225
INSERTS (4 PLACES)
AFTER FINISH

**D2750-041 ASSEMBLY (SHOWN)
D2750-042 ASSEMBLY (OPPOSITE)**

BOND D2739 WEB INTO D2750-1 (OR D2750-2)
OUTER TUBE WITH NON-STRUCTURAL
SIKAFLEX-241 ADHESIVE PER DART QSI 015.
NOTE: ENSURE THAT HOLES LINE UP.

INSTALL ALS4-1032-225
WEARSHOE INSERTS (38 PLACES)
AFTER FINISH

D2750-1 (LH) OR
D2750-2 (RH)

BLACK ANTI-SKID

2.0
(TYP)

1.78 (REF)
(TO D2739 WEB)

D3488-041
(OR D3488-042)

NO INSERT

WELDED SPACER
NOT REQUIRED

D3535-35
D3536-35

AN3C7A BOLT (REF)

D3537-1

D3535-13
D3536-13

D3535-25
D3536-25

RELEASED
07.05.17

D2744 CAP

1/16

**DETAIL H
SCALE 1:5**

INSTALL:
AN3C6A BOLT (1)
AN960C10L WASHER (1)
NAS1515H3L WASHER (1)
(4 PLACES)

**SECTION J-J
SCALE 1:5**

INSTALL AT AFTMOST
D3537-1 WEARPAD:
AN3C7A BOLTS (1)
AN960C10L WASHER (1)
(4 PLACES)

INSTALL:
AN3C5A BOLT (1)
AN960C10L WASHER (1)
(38 PLACES)

**SECTION N-N
SCALE 1:5**

D2743 SPACER (REF)
**SECTION M-M
SCALE 1:5**

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 x 45°
2) INSERT D2743 SPACER
3) WELD INTO PLACE
4) GRIND WELD FLUSH
5) DRILL OUT SPACER TO Ø0.484
6) SPOT FACE Ø0.750 (SECTION P-P ONLY)

INSTALL:
AN6C44A BOLT (1)
D2745 BUSHING (2)
D3631-1 WASHER (2)
MS21043-6 NUT (1)
(4 PLACES)

**SECTION Q-Q
SCALE 1:5**

INSTALL:
AN8C35A BOLT (1)
AN960C816L WASHER (2)
NAS1515H8L WASHER (2)
MS21083C8 NUT (1)

**SECTION R-R
SCALE 1:5**

D3490-3 SPACER
INSTALL:
D3492-043 PLUG
ASSEMBLY
(2 PLACES)

**SECTION K-K
(FOR Ø0.750 HOLES ONLY)
SCALE 1:5**

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 x 45°
2) INSERT D3490-1 SPACER (4 PLACES) INTO
Ø0.500 HOLES OR INSERT D3490-3 SPACER
(4 PLACES) INTO Ø0.750 HOLES
3) WELD INTO PLACE
4) GRIND WELD FLUSH
5) INSERT D3492-041 PLUG ASSEMBLY (8 PLACES)
INTO D3490-1 SPACER OR INSERT D3492-043
PLUG ASSEMBLY (8 PLACES) INTO D3490-3 SPACER
ON BOTH ENDS AFTER FINISH

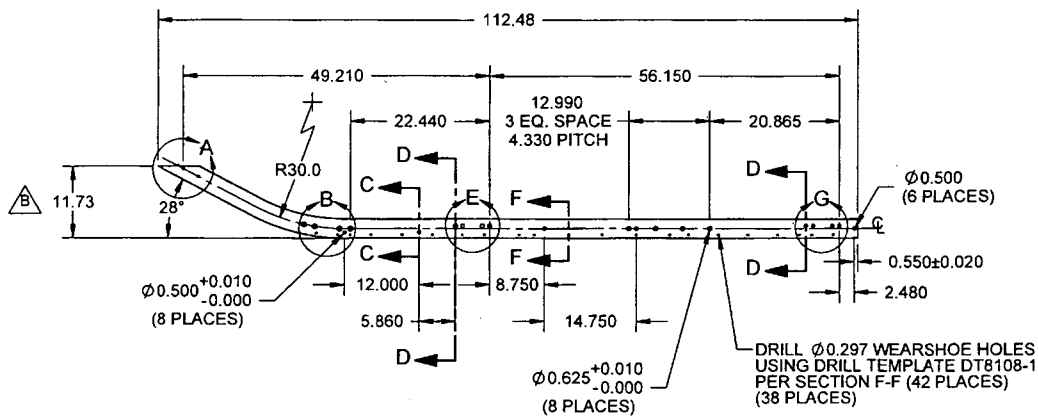
D3490-1 SPACER

INSTALL:
D3492-041 PLUG
ASSEMBLY
(2 PLACES)

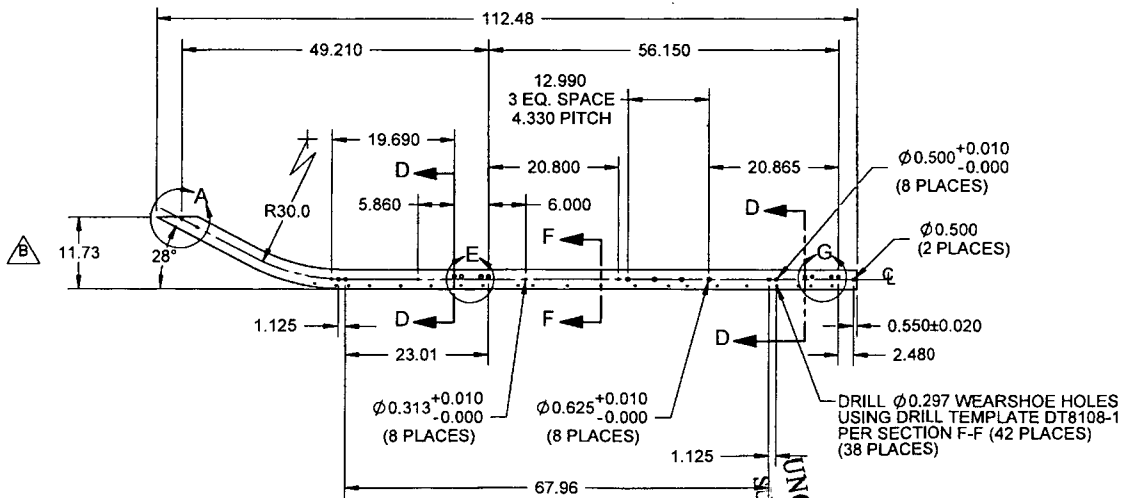
**SECTION L-L
(FOR Ø0.500 HOLES ONLY)
SCALE 1:5**

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 36008

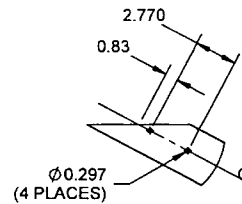
DESIGN PH	DRAWN BY CB	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED PH	APPROVED [Signature]	DRAWING NO. D2750	REV. E SHEET 4 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:10
COPYRIGHT © 1988 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			



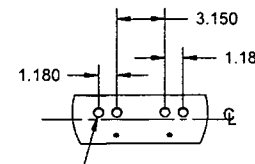
D2750-1 LH SKIDTUBE (SHOWN)
D2750-2 RH SKIDTUBE (OPPOSITE)



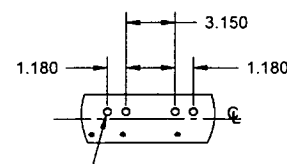
D2750-3 LH SKIDTUBE (SHOWN)
D2750-4 RH SKIDTUBE (OPPOSITE)



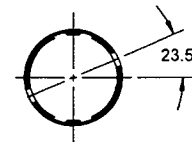
DETAIL A
SCALE 1:8



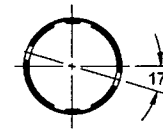
DETAIL E
SCALE 1:8



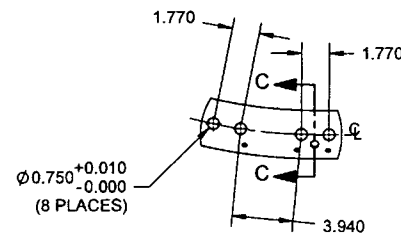
DETAIL G
SCALE 1:8



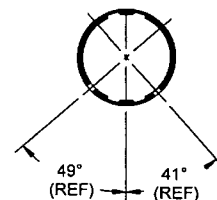
SECTION C-C
SCALE 1:4



SECTION D-D
SCALE 1:4



DETAIL B
SCALE 1:8
(ALL DIMENSIONS ARE
STRAIGHT LINE DIMENSIONS)



SECTION F-F
SCALE 1:4

RELEASED
07-08-01

DESIGN PH	DRAWN BY CB	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED PH	APPROVED [Signature]	DRAWING NO. D2750	REV. E SHEET 3 OF 5
DATE 07.05.17	TITLE 350 SKIDTUBE ASSEMBLY		SCALE 1:20

COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

NO
36008
WORK ORDER
SUBJECT TO AMENDMENT
UNCONTROLLED COPY
ENGINEERING
RETURN TO
SHOP COPY



DESIGN <i>PH</i>	DRAWN BY <i>CB</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2750	REV. E SHEET 2 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS

GENERAL NOTES:

RELEASED
07-08-02 *[Signature]*

1. ALL DIMENSIONS ARE IN INCHES.
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.15 ± 0.030 IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS C-C, D-D AND F-F.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'F' SIZE HOLES ($\emptyset 0.297$) FOR WEARSHOE INSERTS.
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3C5A/AN3C7A WEARSHOE BOLTS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 36008

COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/28/2007 2:21:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 36008

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

55.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

08/01/17 (X)

56.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as per PPP D350-636-012

Rev F 8/1/17 sd (12) AS

57.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/01/18

Job Completion



2008/1/17

h

36008

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 08/01/18

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/28/2007 2:21:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 36008

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

48.0

D2741

Blade



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Blade

Batch: B335435

PC 8/02/17 (1)

49.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Washer

Batch: M106043

SP

50.0

MS21083C8

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Nut

Batch: M1060431

SP

51.0

AN8C21A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bolt

Batch: M105160

SP

52.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: M105430

SP

53.0

D34931

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: B336034

SP

54.0

D35321

spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

spacer

Batch: B333085

SP 11/21/19 (12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/28/2007 2:21:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 36008

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

42.0

MS21083C8

NUT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

NUT

Batch: m104625

FL

43.0

NAS1515H3L

WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

WASHER

Batch: m105116

FL

44.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: m105430

FL

45.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3"

batch: m105005

3-Install blade fitting D3488-042, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: m105585

EXP DATE: 08-07

4-Coat all exposed fasteners with "LPS Procyon"

batch: m104251

FL 07/12/11 ①

46.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

FL 07/12/11 ②

47.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/28/2007 2:21:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 36008

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

35.0

AN3C6A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Batch: M105057

FL

36.0

AN3C7A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Batch: M105906

FL

37.0

AN6C44A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Batch: M106065

FL

38.0

AN8C35A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

BOLT

Batch: M102671

FL

39.0

AN960C10L

washer



Comment: Qty.: 46.0000 Each(s)/Unit Total : 46.0000 Each(s)

washer

Batch: M106431

FL

40.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: M106043

FL

41.0

MS210436

NUT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

NUT

Batch: M103693

FL 01/12/10 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/28/2007 2:21:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 36008

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

28.0

D353635

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
GASKET

D34828

FL

29.0

D35371

WEARPAD



Comment: Qty.: 5.0000 Each(s)/Unit Total : 5.0000 Each(s)
WEARPAD
Batch: *D35696*

FL

30.0

D36311

WASHER



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)
WASHER
Batch: *D34276*

FL

31.0

D3488042

BLADE FITTING ASSEMBLY, RH



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Blade Fitting, RH
Batch: *D32233*

FL

32.0

D3492041

PLUG ASSEMBLY



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)
PLUG ASSEMBLY
Batch: *D35588*

FL

33.0

D3492043

PLUG ASSEMBLY



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)
PLUG ASSEMBLY
Batch: *D35840*

FL

34.0

AN3C5A

Bolt



Comment: Qty.: 38.0000 Each(s)/Unit Total : 38.0000 Each(s)
Bolt
Batch: *B m 106101*

FL 07/12/10

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/28/2007 2:21:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 36008

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP
Inspect Inserts.

N/A

22.0

D2745

Bushing



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)
Bushing
Batch: B35688

FL

23.0

D353513

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
WEARSHOE
Batch: B35562

FL

24.0

D353525

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
WEARSHOE
Batch: B35563

FL

25.0

D353535

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
WEARSHOE
Batch: B34883

FL

26.0

D353613

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
GASKET
Batch: B35565

FL

27.0

D353625

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
GASKET
Batch: B35566

FL 01/12/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/28/2007 2:21:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 36008

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

8-Grind welds flush as per Dwg D2750

9-Spot face ground handling holes section J-J (total of 4 places per side) as per dwg D2750

10-Deburr holes

SL7-12-7

14.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

10 02-12-07 (1)

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

6 07/12/08 (x1)

16.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

MS

07-12-10

(x1)

17.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

M 105914

BR 07-12-10

(1)

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

FL 07/12/10 (1)

19.0

ALS41032225

Insert



Comment: Qty.: 42.0000 Each(s)/Unit Total: 42.0000 Each(s)

Insert

Batch: m100489.

FL

20.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts as per dwg D2750

FL 07/12/10 (1)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/28/2007 2:21:23 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 36008

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

D34901

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Crossbolt spacer

Batch:

B33824

BE 07-12-06

11.0

D34903

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Crossbolt spacer

Batch:

B33825

BE 07-12-06

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Crossbolt Spacer

Batch:

B34309

BE 07-12-06

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes of Detail V & Detail C to 0.625" (total of 8 holes per side)
as per dwg D2750.

2-Open up holes of Detail D to 0.750" (total of 4 holes per side)
as per dwg D2750.

3-Open float holes to .500" (4 per Side)

4-Chamfer holes of Detail V, Detail C, Detail D and hole size "W" per dwg D2750 (welding instructions on sheet 4)

5-Deburr and blow out all chips from inside of tube

6-Prepare tube for welding, remove alodine as required.

6-Bond web D2739 in place as per QSI 015

A/R

Sikaflex-291

batch:

105488

exp. date:

8-7-1

7- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004
(welding instructions on sheet 4)

A/R

Aluminum Rod

batch:

m106035 BE 07-12-06

SL 7-12-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/28/2007 2:21:23 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 36008

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut as per dwg D2750.

4-Drill pilot holes for Detail B using DT8330

5-Open up holes for Detail B, "hole size W" and blade fitting location holes to 0.500" (total of 9 holes per side) as per dwg D2750 .

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 and open to 0.297" ***Make sure that wearplate holes are on bottom of tube*****

7-Open up holes of Detail A to 0.250" (total of 2 holes per side)

9-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004
A/R Aluminum Rod *m 105138 BE 07/12/04*
m 106035

10-Grind welds flush as per Dwg D2750

SL 7-12-04

5.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

10 07-12-05

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/12/05

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SL 7-12-5

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BF 07/12/05

9.0

D2739

350 I Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Web

Batch:

35991

SL 7-12-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries


Date: Wednesday, 11/28/2007 2:21:23 PM
 User: Kim Johnston

Process Sheet

50

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 350 SKIDTUBE ASSEMBLY RH
 Job Number : 36008
 Estimate Number : 10265
 P.O. Number : N/A Part Number : D350636012
 This Issue : 11/28/2007 S.O. No. : N/A Drawing Number : D2750 REV E
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : LANDING GEAR Drawing Revision : E
 Previous Run : 36007 Material : N/A
 Written By : Due Date : 12/12/2007 Qty: 1 Um: Each
 Checked & Approved By : 11/28
 Comment : Est Rev: I 02-09-25 Rearranged procedure steps KJ
 Est Rev: J 06-03-29 As per Rev D EC
 Est Rev: K 06-07-13 As per dsi9343 EC
 Est Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM
 Verified By: EC

Additional Product

Job Number: 

Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



KS 07-11-29

Comment: DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-012 CHG 003

08/06/07

2.0 D26003BENT Extrusion Bent



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2600-3-Bent

Extrusion (Bent)

35527

① H 7-12-4

3.0 D2744 Fwd Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cap

Batch:

33996

BE 7-12-4

4.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details). Drill using drill Jig DT8150 & DT8863 drilling holes labelled "A" only.

H 7-12-4